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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,590	02/15/2001	Rabindranath Dutta	AUS920010034US1	5654
35525	7590	08/23/2005	EXAMINER	
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			BLACKWELL, JAMES H	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/784,590

Applicant(s)

DUTTA ET AL.

Examiner

James H. Blackwell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13-26 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-26 and 29-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is in response to an amendment filed 07/01/2005. The priority date for the original application is **02/15/2001**.
2. Claims 1-41 are pending in the present application. Claims 11-12, and 27-28 have been cancelled by Applicant.
3. The rejection of Claims 1 and 7, and Claims 39 and 40 under 35 U.S.C. 101 have been withdrawn as necessitated by amendment.
4. Corrections made with respect to Figure 6 are approved by the Examiner.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10, 13-26, and 29-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacKenty et al. (hereinafter MacKenty, U.S. Patent No. 6,085,161) in view of Krell et al. (hereinafter Krell, "V-Lynx: Bringing the World Wide Web to Sight Impaired Users", Univ. of Southern Miss., ASSETS '96, 1996 ACM).

**In regard to independent Claim 1 (and similarly independent Claims 7, 17, 23, 33, and 38-40), MacKenty teaches *receiving the document* in that the HTML document received from the browser utility, or some other utility program capable of providing HTML documents (Col. 4, lines 32-34; Fig. 1).**

MacKenty also teaches *parsing the document to identify an occurrence of a selected tag, selected tag having a type of emphasis that has been chosen for early presentation, wherein a first text is associated with the occurrence of the selected tag* in that the received HTML documents are parsed into a tree data structure by the parser (12).

MacKenty further teaches that in one embodiment, the parser (12) produces a tree data structure in which each node of the tree represents an HTML tag whose descendants constitute the portion of the document contained within that tag. In this embodiment, the attributes and values of each tag are attached to the node representing that tag. The parent node of each node represents the HTML tag that encloses the tag represented by that node. The child nodes of each node represent the HTML tags that are enclosed by the tag represented by that node. Character data, which is the textual part of the document between the HTML tags, are represented as leaf nodes of the tree. Character data can be split into multiple nodes of the tree at sentence boundaries, and very long sentences may be further divided into multiple nodes to avoid having any single node containing a large amount of text. The parser (12) may store the tree data structure that it generates in a convenient memory element that is accessible by both the parser (12) and the reader (14). Alternatively, the parser (12) may communicate the tree data structure directly to the reader (14) (Col. 4, lines 33-57).

MacKenty also teaches *audibly presenting the document to a user* (Col. 7, lines 66-67; example HTML file; Col. 7, lines 43-56; Col. 8, lines 1-25).

MacKenty fails to teach that *if an occurrence of the selected tag is identified, the first text is presented prior to presenting other text within the document that is not associated with the selected tag*. However, Krell teaches a web browser with voice output that can read a document a line at a time, read only the first sentence in a paragraph for quick scanning of the document, convey the document structure (headings, emphasized text, lists, hyperlinks), and allow for easy navigation while inside and between documents (Abstract).

In addition, Krell teaches that V-Lynx enables audio browsing and hypertext navigation by giving the user the ability to traverse the document structure and perform actions such as 'move to next section,' 'move to previous section', 'read section', 'browse section' (read only the first line), etc. Since it internally preserves the structure of the HTML document, V-Lynx can also give audio cues about the document (it can tell by looking at the tags what sort of tag it is like "Begin Link" and "End Link") (Pg. 24 RH Col., Paragraph 2). Thus, Krell suggests that V-Lynx is capable of reading certain tagged information before others allowing for the summarization of the page being presented. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of MacKenty and Krell as both inventions relate to audio presentation of web content. Adding the teaching of Krell provides the benefit allowing the user to obtain summaries or an overall view of the web page presented before them without having to see the content.

MacKenty does not explicitly teach *a bus system; a communications unit connected to the bus system; a storage device connected to the bus system, wherein*

*the storage device includes a set of instructions; and a processing unit connected to the bus system.* However, MacKenty does teach that for embodiments in which the sonification engine is provided as a software module, the software module should be invoked using whatever means is provided by the operating system to do so (implies a computer or computer-like device to execute the software; the computer containing one or more of the claimed components). Alternatively, if the sonification engine is provided as firmware or hardware, then the engine can be activated using conventional techniques for communicating with hardware or firmware (communications unit), such as applying an electrical voltage to a signal line to indicate the existence of an interrupt request for service or by writing a predetermined data value to a register (memory). It would have been obvious to one of ordinary skill in the art at the time of invention that MacKenty does provide descriptions and components that when combined in various ways would constitute a device for executing the method as claimed.

**In regard to dependent Claims 2-4 (and similarly dependent Claims 14-16, 18-20, and 30-32), MacKenty teaches that *the document is a markup language document and that the markup language is one of a hypertext markup language document and a extensible markup language document* in that the present invention presents HTML documents to the user as a linear stream of audio information (Col. 1, lines 44-45; Fig. 1).**

**In regard to dependent Claim 5 (and similarly dependent Claim 21), MacKenty teaches *an emphasis level for the first text is based on a type for the selected tag* in that how the device (10) sonifies the HTML document depends on its**

configuration. In one embodiment, the configuration would represent most of the HTML markup using non-speech sounds, and the text using synthesized speech. More specifically, MacKenty implies that different sounds can be played when encountering different markup (e.g., a <BODY> tag could be represented with a low-frequency beep, while a hyperlink tag could be represented by a higher-frequency beep) (Col. 8, lines 1-25). Thus, based on how the user configures the system, different tag types can be represented with different sounds (levels of emphasis).

**In regard to dependent Claim 6 (and similarly dependent Claim 13),**  
MacKenty teaches that the *method is located in a web browser* in that the present invention works with a browser utility, that is, an application for visually displaying HTML documents, to present HTML documents to computer users auditorially, instead of visually. It parses HTML documents, associates the markup and content with various elements of an auditory display, and uses a combination of machine-generated speech and non-speech sounds to represent the documents auditorially to a user (Col. 1, lines 60-67).

**In regard to dependent Claim 8 (and similarly dependent Claim 24),**  
MacKenty teaches that *the data structure is one of a list, a linked list, and a database* in that the parser produces a tree data structure in which each node of the tree represents and HTML tag (Col. 4, lines 38-41). The reader then accesses the tree data structure in order to sonify the page of HTML data that the tree data represents (Col. 4, lines 59-62).

**In regard to dependent Claim 9 (and similarly dependent Claim 25),**  
MacKenty teaches that *each respective text is at least one word* by way of example (see text between <A HREF></A> tags; Col. 7, lines 44-46).

**In regard to dependent Claim 10 (and similarly dependent Claim 26),**  
MacKenty teaches that *the emphasis level is at least one of a volume level and a type of intonation*. MacKenty implies that different sounds can be played when encountering different markup (e.g., a <BODY> tag could be represented with a low-frequency beep, while a hyperlink tag could be represented by a higher-frequency beep) (Col. 8, lines 1-25). Thus, based on how the user configures the system, different tag types can be represented with different sounds (types of intonations).

**In regard to dependent Claim 22 (and similarly dependent Claim 29),** Claim 22 (and similarly Claim 29) contain subject matter that is similar to that found in Claim 1 (and similarly Claims 7, 17, 23, 33, and 38-40) and is rejected along similar lines of reasoning.

**In regard to dependent Claim 41,** MacKenty teaches that *said method identifies the presence of a plurality of tags having respective associated text and said respective associated text of all of said plurality of tags is presented prior to presenting other text within the document* in that in the processing of lines containing <HTML><BODY>The <A HREF=http://www.w3c.org/MarkUp/>Hypertext markup Language (HTML)</A> where the <BODY> tag has associated text "The" and the <A HREF> tag has associated with it the text "Hypertext markup Language (HTML)", which are presented

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in audible form before the remainder of the exemplary web page (Col. 7, lines 43-67;  
Col. 8, lines 1-16).

7. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacKenty in view of Krell, and in further view of Noguchi (U.S. Patent No. 5,983,184).

**In regard to dependent Claim 34, MacKenty fails to explicitly teach that *the bus system is a single bus*.** However, Noguchi teaches in Fig. 1 a single bus (2). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of MacKenty, Krell, and Noguchi as both relate to audibly presenting data. Adding the teaching of Noguchi provides the benefit of more explicitly describing the system associated with MacKenty's invention.

**In regard to dependent Claim 35, MacKenty fails to explicitly teach that *the bus system includes a primary bus and a secondary bus*.** However, Noguchi teaches that the present invention can be implemented by a normal personal computer (PC), a workstation, or a combination of them (hence more than one bus) (Col. 8, lines 53-55). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of MacKenty, Krell, and Noguchi as both relate to audibly presenting data. Adding the teaching of Noguchi provides the benefit of more explicitly describing the system associated with MacKenty's invention.

**In regard to dependent Claim 36, MacKenty fails to explicitly teach that *the processing unit includes a plurality of processors*.** However, Noguchi teaches that the present invention can be implemented by a normal personal computer (PC), a workstation, or a combination of them (hence more than one processor) (Col. 8, lines

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53-55). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of MacKenty, Krell, and Noguchi as both relate to audibly presenting data. Adding the teaching of Noguchi provides the benefit of more explicitly describing the system associated with MacKenty's invention.

**In regard to dependent Claim 37, MacKenty fails to explicitly teach that *the communications unit is one of a modem and Ethernet adapter*. However, Noguchi teaches that the present invention may be implemented as a client/server system wherein a client machine is connected by a LAN to a server machine via Ethernet or a token ring (Col. 9, lines 9-12). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of MacKenty, Krell, and Noguchi as both relate to audibly presenting data. Adding the teaching of Noguchi provides the benefit of more explicitly describing the system associated with MacKenty's invention.**

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-10, 13-26, and 29-41 have been considered but are moot in view of the new ground(s) of rejection. Specifically, the Applicant argues that the prior art of MacKenty fails to teach the limitation *wherein if an occurrence of the selected tag is identified, the first text is presented prior to presenting other text within the document that is not associated with the selected tag*. The Examiner respectfully agrees and withdraws the rejection. However, the Examiner now presents the prior art of Krell et al. which suggests several options that one can use to audibly present portions of the presented web page prior to presenting the rest of the text in the web page, providing several summaries of the contents of the web page.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Blackwell whose telephone number is 571-272-4089. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James H. Blackwell  
08/17/05

*William L. Bashore*  
WILLIAM BASHORE  
PRIMARY EXAMINER  
8/18/2005